

CAUTION — IF YOU HAVE YOUR JOURNALS BOUND, note that the following 1979 author/subject index contains a substantial number of items referenced to the "A--" pages which always precede the serially numbered main scientific content of each issue. These references cite information of value which, by format, does not lend itself to inclusion in the main portion of the issue.

When binding a year's collection of JOURNALS, it is common practice to strip off and discard the "A--" and "B--" portions of each copy. A number of calls have been received recently from researchers trying to locate information in issues dating back a year or more, reporting that they have an "A--" page reference in hand and cannot find such a page in the copy they are checking. Invariably, they are working with a bound volume where the "A--" pages have been scrapped before binding.

BEFORE DISCARDING 1979 "A--" PAGES — CHECK THEIR CONTENT, either by scanning the index and retaining cited pages, or reviewing each issue and retaining those "A--" pages which may be of future value.

Copies of any "A--" pages previously discarded and now needed can be obtained from University Microfilms, Intl. Complete address and telephone number information is listed in the masthead on page A-3 of this or any issue of the JOURNAL.

1979 authors' index . . .

A

ALARIE, Yves, Ph.D.: A short-term test to predict acceptable levels of exposure to airborne sensory irritants	207
Effect of coal dust inhalation on pulmonary immunologic responses	283
Development of methodologies to assess the relative hazards from thermal decomposition products of polymeric materials	408
ALLEN, M. D.: Comparison of the aerodynamic size distribution of chain-like aggregates measured with a cascade impactor and a spiral centrifuge	474
AMDR, Mary O., Ph.D.: Respiratory response of guinea pigs to oil mists	673
Effect of oil mists on the irritancy of sulfur dioxide. I. Mineral oils and light lubricating oil	679
Effect of oil mists on the irritancy of sulfur dioxide. II. Motor oil	809
ANAND, M.: Short-term cotton dust sampling utilizing three non-gravimetric methods	578
ANDERSON, Ernest: Symposium "The impact of energy production on human health — an evaluation of means of assessment"	1103
ANGEHOFER, R. A.: The toxicity of hexachlorethane in laboratory animals	187
ARBOGAST, B.: The determination of polychlorodibenzo-p-dioxins in pentachlorophenol and wood treatment solutions	816
AUSTIN, E.: A model for deposition of stable and unstable aerosols in the human respiratory tract	1055
AVOL, Edward L.: Sulfate aerosol generation and characterization for controlled human exposures	619
AYER, Howard E.: Phorate intoxication at an insecticide formulating plant	1013
AYOUB, M. M.: Predicting lifting capacity	1075

B

BAILEY, Ronald M.: Sulfate aerosol generation and characterization for controlled human exposure	619
BAIR, Herbert S., Jr.: Fire fighter noise exposure	482
BARKLEY, William: Cyanide toxicity from the thermal degradation of rigid polyurethane foam	757
BARON, Paul, Ph.D.: Development of a prototype fibrous aerosol monitor	270
BARROW, Craig S., Ph.D.: A short-term test to predict acceptable levels of exposure to airborne sensory irritants	207
Development of methodologies to assess the relative hazards from thermal decomposition products of polymeric materials	408
BAUMERT, H. P.: The clearance of cadmium aerosols after inhalation exposure	443
BEAUMONT, G. P.: Respirator cartridge test system and test results for benzene and acrylonitrile	883
BELL, Karl A.: Sulfate aerosol generation and characterization for controlled human exposures	619
BELL, R. Hays: Cyanide toxicity from the thermal degradation of rigid polyurethane foam	757
BELL, Zeb G., Jr., Sc.D.: The computerization of industrial hygiene records	709
BENDER, Manfred: Fume hoods, open canopy type — their ability to capture pollutants in various environments	118
BERNSTEIN, David M.: An electronic feedback constant flow controller for high volume samplers and air movers	835

CAUTION — IF YOU HAVE YOUR JOURNALS BOUND, note that the following 1979 author/subject index contains a substantial number of items referenced to the "A--" pages which always precede the serially numbered main scientific content of each issue. These references cite information of value which, by format, does not lend itself to inclusion in the main portion of the issue.

When binding a year's collection of JOURNALS, it is common practice to strip off and discard the "A--" and "B--" portions of each copy. A number of calls have been received recently from researchers trying to locate information in issues dating back a year or more, reporting that they have an "A--" page reference in hand and cannot find such a page in the copy they are checking. Invariably, they are working with a bound volume where the "A--" pages have been scrapped before binding.

BEFORE DISCARDING 1979 "A--" PAGES — CHECK THEIR CONTENT, either by scanning the index and retaining cited pages, or reviewing each issue and retaining those "A--" pages which may be of future value.

Copies of any "A--" pages previously discarded and now needed can be obtained from University Microfilms, Intl. Complete address and telephone number information is listed in the masthead on page A-3 of this or any issue of the JOURNAL.

1979 authors' index . . .

A

ALARIE, Yves, Ph.D.: A short-term test to predict acceptable levels of exposure to airborne sensory irritants	207
Effect of coal dust inhalation on pulmonary immunologic responses	283
Development of methodologies to assess the relative hazards from thermal decomposition products of polymeric materials	408
ALLEN, M. D.: Comparison of the aerodynamic size distribution of chain-like aggregates measured with a cascade impactor and a spiral centrifuge	474
AMDR, Mary O., Ph.D.: Respiratory response of guinea pigs to oil mists	673
Effect of oil mists on the irritancy of sulfur dioxide. I. Mineral oils and light lubricating oil	679
Effect of oil mists on the irritancy of sulfur dioxide. II. Motor oil	809
ANAND, M.: Short-term cotton dust sampling utilizing three non-gravimetric methods	578
ANDERSON, Ernest: Symposium "The impact of energy production on human health — an evaluation of means of assessment"	1103
ANGEHOFER, R. A.: The toxicity of hexachlorethane in laboratory animals	187
ARBOGAST, B.: The determination of polychlorodibenzo-p-dioxins in pentachlorophenol and wood treatment solutions	816
AUSTIN, E.: A model for deposition of stable and unstable aerosols in the human respiratory tract	1055
AVOL, Edward L.: Sulfate aerosol generation and characterization for controlled human exposures	619
AYER, Howard E.: Phorate intoxication at an insecticide formulating plant	1013
AYOUB, M. M.: Predicting lifting capacity	1075

B

BAILEY, Ronald M.: Sulfate aerosol generation and characterization for controlled human exposure	619
BAIR, Herbert S., Jr.: Fire fighter noise exposure	482
BARKLEY, William: Cyanide toxicity from the thermal degradation of rigid polyurethane foam	757
BARON, Paul, Ph.D.: Development of a prototype fibrous aerosol monitor	270
BARROW, Craig S., Ph.D.: A short-term test to predict acceptable levels of exposure to airborne sensory irritants	207
Development of methodologies to assess the relative hazards from thermal decomposition products of polymeric materials	408
BAUMERT, H. P.: The clearance of cadmium aerosols after inhalation exposure	443
BEAUMONT, G. P.: Respirator cartridge test system and test results for benzene and acrylonitrile	883
BELL, Karl A.: Sulfate aerosol generation and characterization for controlled human exposures	619
BELL, R. Hays: Cyanide toxicity from the thermal degradation of rigid polyurethane foam	757
BELL, Zeb G., Jr., Sc.D.: The computerization of industrial hygiene records	709
BENDER, Manfred: Fume hoods, open canopy type — their ability to capture pollutants in various environments	118
BERNSTEIN, David M.: An electronic feedback constant flow controller for high volume samplers and air movers	835

BERTELL, Rosalie, Ph.D.: The nuclear worker and ionizing radiation	395
BISHOP, R.: The toxicity of hexachloroethane in laboratory animals	187
BOCHINSKI, Julius H.: Application of control technology developed in the polyvinyl chloride industry to polymerization processes using acrylonitrile	128
BONOMI, G.: Identification of polycyclic aromatic hydrocarbons in carbon black with reference to cancerogenic risk in tire production	644
BRANDT, Manuel: Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. I. Introduction, experimental design, and aerosol generation methods	238
Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. III — pulmonary function, electro-myograms, limb tremor, and tissue manganese data	349
BRIANT, J. K.: Comparison of the aerodynamic size distribution of chain-like aggregates measured with a cascade impactor and a spiral centrifuge	474
BRIDGE, Dennis P.: Developing and implementing an industrial hygiene and safety program in industry	255
BRIEF, Richard S.: H ₂ S alarms	78
BROCK, J.: A model for deposition of stable and unstable aerosols in the human respiratory tract	1055
BRONSON, Gail: Responsibility of the information media	1172
BROTHERS, Lynda: Information requirements of legislative bodies	1119
BROWN, Frank O., Jr.: How much should a certified industrial hygienist know about health physics?	721
BRUGSCH, Heinrich G., M.D.: Benzene exposure in the rubber coating industry — a follow-up	137
BURGESS, William A.: Simplified description of adsorption breakthrough curves in air cleaning and sampling devices	169
BUSEY, William, DVM, Ph.D.: Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol — I. Introduction, experimental design, and aerosol generation methods	238
Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. II — Clinical observations, hematology, clinical chemistry and histopathology	322
BUSTOS, Jose M.: Quantitative fit-test method for powered air-purifying respirators	291

C

CAMPBELL, Dan N.: The quantitative determination of acrylonitrile, acrolein, acetonitrile and acetone in workplace air	904
CAMPBELL, Evan E.: Symposium "The impact of energy production on human health — an evaluation of means of assessment"	1103
CAPLAN, Knowlton J.: Experimental analysis of lead-in-air sources in lead-acid battery manufacture	637
CAPOROSSI, J. C.: A validation procedure for air sampling-analysis systems	737
CARROLL, James W.: Assessment of hazardous air pollutants from disposal of munitions in a prototype fluidized bed incinerator	147
CARTER, Melvin W.: A retrospective epidemiological study of morbidity at a large western copper smelter	695
CHOURDHAL, Gangadhar: Gas chromatography/mass spectrometry: its application to industrial hygiene analytical problems	39
CLAASSEN, Benjamin J., Jr.: Effects of separated flow on cotton dust sampling with a vertical elutriator	933
CONFER, Robert G.: H ₂ S alarms	78
CONLON, H. J., M.D.: Interlaboratory comparison of blood lead determinations	230
CONSONNI, G.: Identification of polycyclic aromatic hydrocarbons in carbon black with reference to cancerogenic risk in tire production	644
COOK, Lary R.: Monitoring and analysis of personnel exposures to hydrazines at a rocket propellant plant	69
COOPER, Charles V.: Gas chromatography/mass spectrometry: its application to industrial hygiene analytical problems	39
COOPER, Douglas W.: A critique of the U.S. Standard for industrial exposure to sodium hydroxide aerosols	365
COOPER, Gerald: An atomizer of high stability	734
COPE, R. F.: Personnel monitoring for tetraalkyl lead in the workplace	372
CORN, Morton, Ph.D.: Workplace exposure zones for classification of employee exposures to physical and chemical agents	47
Summary of measurements of employee exposure to airborne dust and fiber in sixteen facilities producing man-made mineral fibers	108
COSTA, Daniel L., Sc.D.: Respiratory response of guinea pigs to oil mists	673
Effect of oil mists on the irritancy of sulfur dioxide. I. Mineral oils and light lubricating oil	679
Effect of oil mists on the irritancy of sulfur dioxide. II. Motor oil	809
COSTELLO, Richard J.: Calibration testing of the jet filter as a respirable sampler	942
CRAIG, D. K.: A method for measuring respiratory volume parameters of large animals during exposure to aerosols	567
CROUCH, Christopher N.: Inhalation toxicity studies with 1,3-butadiene — 1. Atmosphere generation and control	789
Inhalation toxicity studies with 1,3-butadiene — 2. three month toxicity study in rats	796
CUDWORTH, Allen L.: Scientific management	1141

D

DAHLGREN, Bengt-Einar: Pollution of delivery ward air by nitrous oxide — methoxyflurane	666
DAISEY, Joan M.: Short-term in vitro bioassays: Applicability to air monitoring in the coal conversion and shale oil industries	823
DARE, Philip R. M.: Inhalation toxicity studies with 1,3-butadiene — 1. Atmosphere generation and control	789
DAVIS, John W., Ph.D.: The use of sand substitution to solve the free silica problem in foundry atmospheres	609
DAVIS, Thomas O.: The physiological consequences of wearing industrial respirators: A review	517
Stresses involved in wearing PVC supplied-air suits: A review	592
DECKER, J. R.: A method for measuring respiratory volume parameters of large animals during exposure to aerosols	567
DEINZER, M.: The determination of polychlorodibenz-p-dioxins in pentachlorophenol and wood treatment solutions	816
DHARMARAJAN, Venkatram, Ph.D.: A recommendation for modifying the standard analytical method for the determination of chlorine in air	161
A new method for the generation of standard atmospheres of organo isocyanates	870
DIEM, John, Ph.D.: Evaluation of dust exposure in asbestos cement manufacturing operations	490
DISTLER, T. M.: Formation of carbon monoxide in air compressors	548
DIXON, David: Predicting lifting capacity	1075
DODSON, Ann T.: The physiological consequences of wearing industrial respirators: A review	517
Stresses involved in wearing PVC supplied-air suits: A review	592
DOEMENY, Laurence J., Ph.D.: A modified impinger for personal sampling	354
DORATO, Michael A., Ph.D.: Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. II — Clinical observations, hematology, clinical chemistry and histopathology	322
DRAVNIEKS, Andrew, Ph.D.: Annoyance potentials of air pollution odors	85
DRUMMUND, I.: An improved method for determination of 4,4'-methylene bis-(2-chloroaniline) (MOCA®) in urine	66
DRYDEN, Robert: Predicting lifting capacity	1075
DUFOUR, James T.: Who determines the risk to human health associated with energy technology	1207

E

ECKARDT, Robert E.: The scientist and health information: Responsibility of the scientist	1136
EGLE, John L., Jr.: Respiratory retention and acute toxicity of furan	310
Retention of inhaled 2-methylfuran and 2,5-dimethylfuran	866
EINFELD, Wayne: Investigation of a dual filter sampling method for gaseous and particulate fluoride	626
EISENLORD, G. H.: Three-month inhalation exposure study with methane sulfonylfluoride	986
EL-DAKHAKHNY, A.: A six-year follow up study for evaluation of the 85 dBA safe criterion for noise exposure	424
ELLISSALDE, M. H., Jr.: The role of cyclic AMP and cyclic GMP in byssinosis	1067
ELKINS, Hervey B., Ph.D.: Benzene exposure in the rubber coating industry — a follow-up	137
ELLENBECKER, Michael J.: A critique of the U.S. standard for industrial exposure to sodium hydroxide aerosols	365
EL-SADIK, Y. M.: A six-year follow up study for evaluation of the 85 dBA safe criterion for noise exposure	424
ELTERMAN, Paul B., Ph.D.: Development of a prototype fibrous aerosol monitor	270
EPSTEIN, Samuel S.: Information requirements of the public	1152
ESMEN, Nurtan, Ph.D.: Retrospective industrial hygiene surveys	58
Summary of measurements of employee exposure to airborne dust and fiber in sixteen facilities producing man-made mineral fibers	108
Workplace exposure zones for classification of employee exposures to physical and chemical agents	47
ESPOSITO, G. G.: Field evaluation of selected monitoring methods for phosgene in air	387

F

FELTON, Jean Spencer, M.D.: A comprehensive program in asbestos hazard surveillance and education	11
FIELDS, Ronald L.: Biomonitoring of industrial styrene exposures	451
FISCHBEIN, Alf, M.D.: Drywall construction and asbestos exposure	402
FISHBECK, W. A., M.D.: An effective hearing conservation program	604
FOREST, Denis: A sampling and analytical method for vinylidene chloride in air	888
FORNES, R. E.: Short-term cotton dust sampling utilizing three non-gravimetric methods	578
FRANEY, J. P.: Gaseous hydrogen sulfide determination by discoloration of lead-stabilized PVC	947
FRANTUZZI, A.: Identification of polycyclic aromatic hydrocarbons in carbon black with reference to cancerogenic risk in tire production	644

G

GAGNON, Yvonne T.: Recovery of acrylonitrile from charcoal tubes at low levels	923
GARG, Arun: Effects of lifting frequency and technique on physical fatigue with special reference to psycho-physical methodology and metabolic rate	894
GARRIDO, C. H., Jr.: Respirator cartridge test system and test results for benzene and acrylonitrile	883
GAUNT, Ian F., Ph.D.: Inhalation toxicity studies with 1,3-butadiene — 2. three month toxicity study in rats	796
GELMAN, Charles: New filter compositions for the analysis of airborne particulate and trace metals	926
GIBSON, Roy L., M.D.: The U.S. oil shale industry: A health perspective	460
GIDEON, James A.: Application of control technology developed in the polyvinyl chloride industry to polymerization processes using acrylonitrile	128
GLENN, Robert E.: Monitoring and analysis of personnel exposures to hydrazines at a rocket propellant plant	69
GOCHBERG, Bethe J.: Respiratory retention and acute toxicity of furan	310
Retention of inhaled 2-methylfuran and 2,5-dimethylfuran	866
GRAEDEL, T. E.: Gaseous hydrogen sulfide determination by discoloration of lead-stabilized PVC	947
GREENBLATT, Gerald A.: Endotoxin-induced histamine hypersensitivity in mice . . . a model system for byssinosis?	74
Inhibition of luminol-dependent chemiluminescence of alveolar macrophages by possible etiological agents of byssinosis	860
The role of cyclic AMP and cyclic GMP in byssinosis	1067
GRIFFIN, D.: The determination of polychlorodibenzo-p-dioxins in pentachlorophenol and wood treatment solutions	816
GRUBNER, Otto: Simplified description of adsorption breakthrough curves in air cleaning and sampling devices	169
GRUMBLES, Thomas G.: Benzene exposures during gasoline loading at bulk marketing terminals	468
GRUNDER, F. I.: Evaluation of zinc protoporphyrin in an occupational environment	686
GUINIVAN, Thomas L.: Assessment of hazardous air pollutants from disposal of munitions in a prototype fluidized bed incinerator	147
Field evaluation of selected monitoring methods for phosgene in air	387

H

HAHN, K. J.: Monitoring personal exposure to ethylenediamine in the occupational environment	512
HAMMAD, Yehia, Sc.D.: Summary of measurements of employee exposure to airborne dust and fiber at sixteen facilities producing man-made mineral fibers	108
Evaluation of dust exposure in asbestos cement manufacturing operations	490
HANSEN, Wayne: Symposium "The impact of energy production on human health — an evaluation of means of assessment	1103
HEITBRINK, William A.: A modified impinger for personal sampling	354
HEMINGWAY, R. E., Ph.D.: Cardiac arrhythmias and blood levels associated with inhalation of Halon 1301	653
HENRY, N. W., III: An evaluation of respirator canisters to acrylonitrile vapors	1017
HERMANN, Edward R., Ph.D.: Influence of sonic noise on human stereoscopic depth perception	427
HERMES, Robert E.: Air sampling and analytical procedures for benzene, dichlorobenzidine and their salts	970
HERSH, S. P.: Short-term cotton dust sampling utilizing three non-gravimetric methods	578
HESS, T. L.: Field evaluation of selected monitoring methods for phosgene in air	387
HESSE, Carolyn S.: Influence of sonic noise on human stereoscopic depth perception	427
HESTON, K. G.: Field evaluation of selected monitoring methods for phosgene in air	387
HICKEY, John L. S.: Adjusting occupational exposure limits for moonlighting, overtime, and environmental exposures	727
HINDERER, Robert K.: Toxicity studies of methylcyclopentadienyl manganese tricarbonyl (MMT)	164
HINE, C. H., M.D., Ph.D.: Three-month inhalation exposure study with methane sulfonylfluoride	986
HIRAYAMA, Toshiko: Applicability of activated carbon felt to the dosimetry of solvent vapor mixture	1091
HO, James Shou-Yien, Ph.D.: Collaborative study of reference vinyl chloride charcoal tubes	200
HOCHRAINER, D.: The clearance of cadmium aerosols after inhalation exposure	443
HOLLAND, J. M.: Correlation of fluorescence intensity and carcinogenic potency of synthetic and natural petroleums in mouse skin	496
HOLLINGSWORTH, Lois D.: Cyanide toxicity from the thermal degradation of rigid polyurethane foam	757
HOLM, Dale M.: Symposium "The impact of energy production on human health — an evaluation of means of assessment	1103
HORSTMAN, S. W., Ph.D.: Biomonitoring of industrial styrene exposures	451
Investigation of a dual filter sampling method for gaseous and particulate fluoride	626
A critical evaluation of the protection provided by common safety glasses from ultraviolet emissions in welding operations	770
HOYLE, E. Robinson: Influence of sonic noise on human stereoscopic depth perception	427
HOYLE, H. R.: Two methods for establishing industrial hygiene priorities	1039
HUGHES, Ernest E.: A calibration system for producing known concentrations of mercury vapor in air	180

IKEDA, Masayuki: Applicability of activated carbon felt to the dosimetry of solvent vapor mixture	1091
INGRAM, Jere W.: A critical evaluation of the protection provided by common safety glasses from ultraviolet emissions in welding operations	770
INMAN, R.: The determination of polychlorodibenzo-p-dioxins in pentachlorophenol and wood treatment solutions	816
ISOT, Holly H.: Effect of coal dust inhalation on pulmonary immunologic responses	283
IRVING, W. S., Jr., Ph.D.: Benzene exposures during gasoline loading at bulk marketing terminals	468

J

JANKOWSKI, Robert A.: Assessment of the respirable dust levels in the nation's underground and surface coal mining operations	910
JOHN, J. A.: Embryotoxicity of inhaled benzene in mice and rabbits	993
JOHNSTON, Ova E.: The efficiency of respirator filters in a coke oven atmosphere	1030
JONES, William: Field comparison of two methods for the determination of NO ₂ concentration in air	437
JUNG, Francis P.: Phorate intoxication at an insecticide formulating plant	1013

K

KANAPILLY, G. M.: Generation and characterization of condensation aerosols of vanadium pentoxide and pyrene	763
KANE, Laurel E., Ph.D.: A short-term test to predict acceptable levels of exposure to airborne sensory irritants	207
KAROL, Meryl H., Ph.D.: Effect of coal dust inhalation on pulmonary immunologic responses	283
KETCHAM, N. H.: Monitoring personal exposure to ethylenediamine in the occupational environment	512
KLEIN, A. L.: An improved method for determination of 4,4'-methylene bis-(2-chloroaniline) (MOCA®) in urine	66
KNIPFER, Ronald: Predicting lifting capacity	1075
KNUTSON, Gerhard W., Ph.D.: Experimental analysis of lead-in-air sources in lead-acid battery manufacture	637
KOTSKO, Nancy: Summary of measurements of employee exposure to airborne dust and fiber in sixteen facilities producing man-made mineral fibers	108
KRAEMER, Paul M.: Symposium "The impact of energy production on human health — an evaluation of means of assessment	1103
The importance of basic cancer research	1131
KUHLEMEIER, K. V.: Laboratory evaluation of permissible exposure limits for men in hot environments	1097
KUNA, R. A.: Embryotoxicity of inhaled benzene in mice and rabbits	993

L

LAMBERTON, J.: The determination of polychlorodibenzo-p-dioxins in pentachlorophenol and wood treatment solutions	816
LANDE, Sheldon S.: Measurement of atmospheric vinyl chloride	96
LANGER, Arthur M., Ph.D.: Drywall construction and asbestos exposure	402
LANGNER, R. R.: Computer handling of occupational exposure data	553
Two methods for establishing industrial hygiene priorities	1039
LANGVARDT, Patrick W.: Simultaneous determination of polar and non-polar solvents in air using a two-phase desorption from charcoal	1006
LANKFORD, James E.: Relative ear protector performance in high vs low sound levels	1023
LEDBETTER, Joe O.: Calibration testing of the jet filter as a respirable sampler	942
LEOPOLD, Anne C.: Influence of sonic noise on human stereoscopic depth perception	427
LEVINE, Marshal S., Ph.D.: Respirator use and protection from exposure to carbon monoxide	832
LI, Kenneth C.: The collection of arsenic oxide vapor in water-filled impingers	439
LI COTTI, I.: Identification of polycyclic aromatic hydrocarbons in carbon black with reference to cancerogenic risk in tire production	644
LILIENFELD, Pedro: Development of a prototype fibrous aerosol monitor	270
LILLIAN, Daniel L., Ph.D.: Assessment of hazardous air pollutants from disposal of munitions in a prototype fluidized bed incinerator	147
Field evaluation of selected monitoring methods for phosgene in air	387
LOCATI, G.: Identification of polycyclic aromatic hydrocarbons in carbon black with reference to cancerogenic risk in tire production	644
LOCKWOOD, William T.: The efficiency of respirator filters in a coke oven atmosphere	1030
LONG, J. E., Sc.D.: Three-month inhalation exposure study with methane sulfonylfluoride	986
LOSIKOFF, Andrew M.: Potential hazard associated with scraping preparative thin layer chromatography plates	543
LOWRY, Philip L.: Quantitative fit-test method for powered air-purifying respirators	291

LUCIA, Helen, M.D.: Development of methodologies to assess the relative hazards from thermal decomposition products of polymeric materials	408
LUND, Arthur O.: Noise control enclosures for industrial equipment	961
LYONS, J., Ph.D.: Three-month inhalation exposure study with methane sulfonylfluoride	986
M	
MAGNANTE, Peter C., Ph.D.: Vapor detection using adsorptive solids probed by X-rays	955
MAHER, C. C., Ph.D.: Interlaboratory comparison of blood lead determinations	230
MAROLD, Bruce W.: Pulmonary deposition of aerosols in individual and group caged rats	633
MARTIN, James A.: Methods for answering scientific questions underlying social decisions	1147
MCCOLLUM, R. W.: A validation procedure for air sampling-analysis systems	737
McDANIEL, Joe: Predicting lifting capacity	1075
McDERMOTT, H. J.: Service station attendants' exposure to benzene and gasoline vapors	315
McENTIRE, R. H., Ph.D.: Artificial cutting-fluid smoke generation: effect of pressure	562
McKEE, Daniel W.: A retrospective epidemiological study of morbidity at a large western copper smelter	695
MEHTA, Devendra V.: New filter compositions for the analysis of airborne particulate and trace metals	926
MELCHER, Richard G.: Simultaneous determination of polar and non-polar solvents in air using a two-phase desorption from charcoal	1006
MELLOR, J. F.: A validation procedure for air sampling-analysis systems	737
MELTZER, Theodore H.: New filter compositions for the analysis of airborne particulate and trace metals	926
MILLER, James A.: Determination of airborne organic vapor mixtures using charcoal tubes	380
MILLSON, Mark: Field comparison of two methods for the determination of NO ₂ concentration in air	437
MOFFITT, A. E., Jr., Sc.D.: Evaluation of zinc protoporphyrin in an occupational environment	686
MOKLER, Brian V.: Respirable particulates generated by pressurized consumer products. I — Experimental method and general characteristics	330
Respirable particulates generated by pressurized consumer products. II — Influence of experimental conditions	339
MONTALVO, Joseph G., Jr.: Total elemental content passive personal monitors	1046
MOORE, Raymond H.: The quantitative determination of acrylonitrile, acrolein, acetonitrile and acetone in workplace air	904
MORALES, Raul: Air sampling and analytical procedures for benzidine, 3,3'-dichlorobenzidine and their salts	970
MOREY, P. R.: Botanical trash analysis of raw materials used in the cotton garnetting industry	264
Botanically what is raw cotton dust?	702
MOSELHI, M.: A six-year follow up study for evaluation of the 85 dBA safe criterion for noise exposure	424
MOSS, O. R.: Comparison of the aerodynamic size distribution of chain-like aggregates measured with a cascade impactor and a spiral centrifuge	474
MUELLER, Francis X.: Determination of airborne organic vapor mixtures using charcoal tubes	380
MUKAI, Frank: Short-term in vitro bioassays: Applicability to air monitoring in the coal conversion and shale oil industries	823
MULLIN, L. S., M.A.: Cardiac arrhythmias and blood levels associated with inhalation of Halon 1301	653
MURRAY, F. J.: Embryotoxicity of inhaled benzene in mice and rabbits	993
N	
NEALEY, Stanley M.: Perspectives on public acceptance of nuclear power	1178
NICOLAIDES, P.: Effect of random airway sizes on aerosol deposition	999
NORWOOD, S. K.: Two methods for establishing industrial hygiene priorities	1039
NOWIER, Madbuli H., Sc.D.: Highlights of broad-spectrum industrial hygiene research activities in a developing country — Egypt (1979 Yant Memorial Lecture . . .)	839
O	
OBERDORSTER, G.: The clearance of cadmium aerosols after inhalation exposure	443
OLANDER, Lars: Pollution of delivery ward air by nitrous oxide — methoxyflurane	666
OLSON, R. D.: Computer handling of occupational exposure data	553
OLSON, Richard D.: An effective hearing conservation program	604
O'NEILL, Hugh J., Ph.D.: Annoyance potentials of air pollution odors	85
OSHEROFF, Boris J.: Information requirements related to new energy technologies: NIOSH viewpoint	1126
OVRUM, Per: Pollution of delivery ward air by nitrous oxide — methoxyflurane	666
OPIELA, Helmut: Size-selective preparation of inorganic fibers for biological experiments	20
OSETEK, D. J.: A new method for in-place testing of tandem HEPA filter installations	979

P

PAGNOTTO, Leonard D.: Benzene exposure in the rubber coating industry — a follow-up	137
PALMES, E. D., Ph.D.: Field comparison of two methods for the determination of NO_2 concentration in air	437
Personal sampler for NO_2	588
PANCAMO, B. P.: Personnel monitoring for tetraalkyl lead in the workplace	372
PARK, J. F.: A method for measuring respiratory volume parameters of large animals during exposure to aerosols	567
PAROBECK, Paul S.: Assessment of the respirable dust levels in the nation's underground and surface coal mining operations	910
PETERSEN, R. C.: Electromagnetic radiation emitted from video computer terminals	300
PICKERING, George: Science and society in the seventies: The making of a new agenda, or, if it's not the technology, what is it?	1191
PODOLAK, G. E.: Field evaluation of selected monitoring methods for phosgene in air	387
Monitoring and analysis of personnel exposures to hydrazines at a rocket propellant plant	69
POPE, C. R.: The toxicity of hexachloroethane in laboratory animals	187
POSNER, Judd C.: Recovery of acrylonitrile from charcoal tubes at low levels	923
PULLINGER, David H., Ph.D.: Inhalation toxicity studies with 1,3-butadiene — 1. Atmosphere generation and control	789
Inhalation toxicity studies with 1,3-butadiene — 2. three month toxicity study in rats	796
PUNTONI, R.: Adsorption properties of U.I.C.C. Rhodesian chrysotile and crocidolite in aqueous solution — effects of cation depletion	781
PUPP, Christian: The collection of arsenic oxide vapor in water-filled impingers	439

Q

QAZI, A. H.: Sampling and analysis of acetic anhydride in air	803
---	-----

R

RAMPY, L. W.: Embryotoxicity of inhaled benzene in mice and rabbits	993
RANDO, Roy J.: A recommendation for modifying the standard analytical method for the determination of chlorine in air	161
A new method for the generation of standard atmospheres of organo isocyanates	870
RAPPAPORT, Stephen M.: Air sampling and analytical procedures for benzidine, 3,3'-dichlorobenzidine and their salts	970
RAVEN, Peter B., Ph.D.: The physiological consequences of wearing industrial respirators: A review	517
Stresses involved in wearing PVC supplied-air suits: A review	592
REINGOLD, Nathan: The scientist as troubled American	1103
REINHARDT, C. F., M.D.: Cardiac arrhythmias and blood levels associated with inhalation of Halon 1301	653
REISCHL, Peter, Ph.D.: Fire fighter noise exposure	482
REISCHL, Uwe, Ph.D.: Fire fighter noise exposure	482
REIST, Parker C.: Adjusting occupational exposure limits for moonlighting, overtime, and environmental exposures	727
RENCHER, Alvin C.: A retrospective epidemiological study of morbidity at a large western copper smelter	695
RENNER, J. A.: Analysis of ethylene oxide — worker exposure	734
RINEHART, William, Sc.D.: Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol — I Introduction, experimental design, and aerosol generation methods	238
Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. II — Clinical observations, hematology, clinical chemistry and histopathology	322
Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. III — Pulmonary function, electro-myograms, limb tremor, and tissue manganese data	349
Personnel monitoring for tetraalkyl in the workplace	372
ROBERT, Kearny Q., Jr.: Cotton dust sampling efficiency of the vertical elutriator	535
ROETTGERS, D. M.: Interlaboratory comparison of blood lead determinations	230
ROHL, Arthur N., Ph.D.: Drywall construction and asbestos exposure	402
ROMANO, S. J., Ph.D.: Analysis of ethylene oxide — worker exposure	742
ROWE, V. K., Sc.D.: Industrial hygiene — truly an interdisciplinary science (Cummings lecture)	751
ROWE, W. D.: Risk/benefit determination	1200
ROYSTER, L. H., Ph.D.: Age effect hearing levels for a white nonindustrial noise exposed population (ninep) and their use in evaluating industrial hearing conservation programs	504

S

SAMELSON, Richard J.: The computerization of industrial hygiene records	709
SAMUELS, Sheldon W.: Communicating with workers (and everyone else)	1159
SANSONE, Eric B.: Potential hazard associated with scraping preparative thin layer chromatography plates	543
SANTI, L.: Adsorption properties of U.I.C.C. Rhodesian chrysotile and crocidolite in aqueous solution — effect of cation depletion	781
SAXENA, U.: Effects of lifting frequency and technique on physical fatigue with special reference to psycho-physical methodology and metabolic rate	894
SCHEIDE, Eugene P., Ph.D.: A calibration system for producing known concentrations of mercury vapor in air	180
SCHMIDT, Carole: Lead determination in blood by atomic absorption spectroscopy	1085
SCHOULTZ, Kenneth S.: Application of control technology developed in the polyvinyl chloride industry to polymerization processes using acrylonitrile	128
SCHUSTER, B. G.: A new method for in-place testing of tandem HEPA filter installations	979
SCHWETZ, B. A.: Embryotoxicity of inhaled benzene in mice and rabbits	993
SEDERLUND, E. R.: Computerization of data from continuous and sequential air monitoring systems	545
SELIKOFF, Irving J., M.D.: Drywall construction and asbestos exposure	402
SHEPHERD, George R.: Information requirements of the Department of Energy	1114
SHOTWELL, H. P.: Quality control in air sampling pump calibration	249
A validation procedure for air sampling-analysis systems	737
SMITH, David L.: The efficiency of respirator filters in a coke oven atmosphere	1030
SMITH, David M.: Symposium "The impact of energy production on human health — an evaluation of means of assessment"	1103
SMYTH, Henry F., Jr., Ph.D.: Current confidence in occupational health (1979 Stokinger Lecture)	659
SMITH, N. V.: Field evaluation of selected monitoring methods for phosgene in air	387
SNOW, Michael J.: Respirable particulates generated by pressurized consumer products. I — Experimental method and general characteristics	330
Respirable particulates generated by pressurized consumer products. II — Influence of experimental conditions	339
SNYDER, Philip J.: The computerization of industrial hygiene records	709
SOCHA, G. E.: Local exhaust ventilation principles	1
Computerization of data from continuous and sequential air monitoring systems	545
Computer handling of occupational exposure data	553
Two methods for establishing industrial hygiene priorities	1039
SOMERS, W. K.: Artificial cutting-fluid smoke generation; Effect of pressure	562
SOONG, T. T.: Effect of random airway sizes on aerosol deposition	999
SPINDLER, Donald E.: An effective hearing conservation program	604
SPURNY, Kvetoslav R.: Size-selective preparation of inorganic fibers for biological experiments	20
STANDARD, John J.: Influence of sonic noise on human stereoscopic depth perception	427
STEMMER, Klaus L.: Cyanide toxicity from the thermal degradation of rigid polyurethane foam	757
STOBER, W.: The clearance of cadmium aerosols after inhalation exposure	443
Size-selective preparation of inorganic fibers for biological experiments	20
STOCK, Maryanne F.: Development of methodologies to assess the relative hazards from thermal decomposition products of polymeric materials	408
STORY, G. L.: Computer handling of occupational exposure data	553

T

TAYLOR, John K., Ph.D.: A calibration system for producing known concentrations of mercury vapor in air	180
TER HAAR, G. L.: Personnel monitoring for tetraalkyl lead in the workplace	372
THOMAS, W. G., Ph.D.: Age effect hearing levels for a white nonindustrial noise exposed population (ninep) and their use in evaluating industrial hearing conservation programs	504
THOMASINO, J.: The toxicity of hexachloroethane in laboratory animals	187
THUNDER, Thomas D.: Relative ear protector performance in high vs low sound levels	1023
TOMCZYK, Carol: Field comparison of two methods for the determination of NO ₂ concentration in air	437
Personal sampler for NO _x	588
TU, K. W.: Generation and characterization of condensation aerosols of vanadium pentoxide and pyrene	763
TUGGLE, R. M., Ph.D.: Field evaluation of selected monitoring methods for phosgene in air	387
Assessment of hazardous air pollutants from disposal of munitions in a prototype fluidized bed incinerator	147

U

ULRICH, Charles E.: Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol — I Introduction, experimental design, and aerosol generation methods	238
---	-----

1979 AUTHORS INDEX . . .

Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. II — Clinical observations, hematology, clinical chemistry and histopathology	322
Evaluation of the chronic inhalation toxicity of a manganese oxide aerosol. III — pulmonary function, electro-myograms, limb tremor, and tissue manganese data	349
Pulmonary deposition of aerosols in individual and group caged rats	633
UNDERHILL, Dwight W.: A critique of the U.S. standard for industrial exposure to sodium hydroxide aerosols	365

V

VALERIO, F.: Adsorption properties of U.I.C.C. Rhodesian chrysotile and crocidolite in aqueous solution — effects of cation depletion	781
VAN ROOSMALEN, P. B.: An improved method for determination of 4,4'-methylene bis-(2-chloroaniline) (MOCA®) in urine	66
VINCENT, W. J.: Monitoring personal exposure to ethylenediamine in the occupational environment	512
Sampling and analysis of acetic anhydride in air	803
VOS, G. A.: Service station attendants' exposure to benzene and gasoline vapors	315

W

WEAVER, Neill K., M.D.: The U.S. oil shale industry: A health perspective	460
The impact of energy production on human health	1164
WEEKS, M. H.: The toxicity of hexachloroethane in laboratory animals	187
WEILL, Hans, M.D.: Evaluation of dust exposure in asbestos cement manufacturing operations	490
WEIR, Francis W., Ph.D.: Health hazard from occupational exposure to metallic copper and silver dust	245
WEISS, Gerhard: Size-selective preparation of inorganic fibers for biological experiments	20
WEISS, M. M.: Electromagnetic radiation emitted from video computer terminals	300
WESLEY, J. W.: Correlation of fluorescence intensity and carcinogenic potency of synthetic and natural petroleums in mouse skin	496
WHEAT, Lloyd D.: Quantitative fit-test method for powered air-purifying respirators	291
WHITAKER, M. S.: Correlation of fluorescence intensity and carcinogenic potency of synthetic and natural petroleums in mouse skin	496
WHITTIER, Diane: Summary of measurements of employee exposure to airborne dust and fiber in sixteen facilities producing man-made mineral fibers	108
WILHELME, R. S.: An evaluation of respirator canisters to acrylonitrile vapors	1017
WILLIAMS, John R.: Permeation of glove materials by physiologically harmful chemicals	877
WILLIAMS, Kenneth E.: Assessment of hazardous air pollutants from disposal of munitions in a prototype fluidized bed incinerator	147
WISSLER, E.: A model for deposition of stable and unstable aerosols in the human respiratory tract	1055
WOLMAN, Abel: Symposium "The impact of energy production on human health — an evaluation of means for assessment"	1217
WONG, Brian A.: Respirable particulates generated by pressurized consumer products. I — Experimental method and general characteristics	330
Respirable particulates generated by pressurized consumer products. II — Influence of experimental conditions	339
WOOD, Herbert T., Ph.D.: The use of the air pollution episode system as a criterion for curtailment of out-of-doors work	248
WOOD, T. B.: Laboratory evaluation of permissible exposure limits for men in hot environments	1097
WRIGHT, J. A.: Three-month inhalation exposure study with methane sulfonylfluoride	986

Y

YOUNG, Ronald J.: Phorate intoxication at an insecticide formulating plant	1013
YU, C. P.: Effect of random airway sizes on aerosol deposition	999

Z

ZIPRIN, Richard L.: Endotoxin-induced histamine hypersensitivity in mice . . . a model system for byssinosis?	74
Inhibition of luminol-dependent chemiluminescence of alveolar macrophages by possible etiological agents of byssinosis	860

1979 subject index . . .

A . . .

acetic anhydride, sampling and determination in air	803	for ethylene oxide	742
acetone, determination in air	904	for MOCA	66
acetonitrile, determination in air	904	analysis system, validation of	737
acrolein, determination in air	904	animal species, use of appropriate	659
acrylonitrile, control technology for	128	annoyance, of odors	85
determination in air	904	arsenic hydride, see arsine	
recovery from charcoal	923	arsenic oxide, vapor collection in water	439
respirator canisters for	1017	arsine, NIOSH bulletin	(10):A-56
test of respirators	883	properties and hazards	(10):A-56
activated carbon, with x-ray for vapors	955	asbestos, adsorption properties of	781
activated charcoal felt, for solvent dosimetry	1091	automatic counting	(7):A-50
additives, as carcinogens	685	automatic detection	(7):A-50
adsorption, cation depletion in	781	hazard surveillance	11
of acetic anhydride	803	asbestos cement, dust from manufacturing	490
of dyes by asbestos	781	asbestos dust, from drywall construction	402
properties of asbestos	781	hazards of	(5):A-20
properties of chrysotile	781	asbestosis, from asbestos cement making	490
properties of crocidolite	781	atomic absorption spectroscopy, determination of	
adsorption beds, breakthrough curves	169	lead in blood	1085
adsorption samplers, with x-ray for vapors	955	atomizer, design of stable	734
aerodynamic size, of chain-like aggregates	474	attenuation, of noise by ear protectors	1023
aerosol deposition, effect of airway size	999		
in respiratory tract	1055		
influence of breathing pattern	1055		
statistical lung model for	999		
aerosol generation, of manganese oxide	238		
aerosol generator, high volume DOP	979		
aerosol sprays, exposure calculations	748		
simulation of exposures	748		
aerosols, by vaporization-condensation	763		
cadmium in lungs	443		
fibrous	270		
from pressurized products	330, 339		
generation of	763		
of manganese dioxide	349		
of manganese oxide	322		
of pyrene	763		
of sodium hydroxide	365		
of vanadium pentoxide	763		
aerospace workers, hearing of	436		
age, effect on hearing	504		
aggregate particles, sizing of	474		
air cleaning, breakthrough curves	169		
air compressors, carbon monoxide in	548		
air flow, control for hi-vol samplers	835		
electronic control in samplers	835		
air pollution episode, work suspension during	248		
air pollution, incinerating munitions	147		
air pumps, calibration of	249		
air sampling, see sampling			
airless spraying, injuries from	822		
analgesic gases, in delivery ward air	666		
alarm system, for hydrogen sulfide	78		
alkyl lead, personnel monitoring for	372		
ammonium bisulfate, aerosol exposures	619		
ammonium sulfate, aerosol exposure	619		
analysis, by gas chromatography/mass spectrometry	39		
		for ethylene oxide	742
		for MOCA	66
		analysis system, validation of	737
		animal species, use of appropriate	659
		annoyance, of odors	85
		arsenic hydride, see arsine	
		arsenic oxide, vapor collection in water	439
		arsine, NIOSH bulletin	(10):A-56
		properties and hazards	(10):A-56
		asbestos, adsorption properties of	781
		automatic counting	(7):A-50
		automatic detection	(7):A-50
		hazard surveillance	11
		asbestos cement, dust from manufacturing	490
		asbestos dust, from drywall construction	402
		hazards of	(5):A-20
		asbestosis, from asbestos cement making	490
		atomic absorption spectroscopy, determination of	
		lead in blood	1085
		atomizer, design of stable	734
		attenuation, of noise by ear protectors	1023

B . . .

back injuries, from lifting	1075
basic research, to produce an application	1141
battery plates, lead in air from handling	637
benzene, embryotoxicity of	993
exposure to	315
from gasoline loading	468
in rubber coating	137
long-term exposure to	137
penetration of gloves	877
teratogenic effects of	993
test of respirators	883
benzene solubles, penetration of filters	1030
benzidine, air sampling and analysis for	970
benzo(a)pyrene, penetration of filters	1030
benzopyrene, in shale oil	460
Beryllium Case Registration, address of	57
bioassay, for dibromoethane	(2):A-31
bioassays, in coal conversion environment	823
in industrial monitoring	823
in shale oil production	823
biologic sampling, for tetraalkyl lead	372
biologic threshold, of zinc protoporphyrin	686
biological limits, for styrene	451
biological monitoring, for phorate	1013
biomonitoring, of styrene exposures	451
birth defects, from benzene	993
blood, determination of lead in	1085
blood lead, determination of	230
laboratory proficiency tests for	230
botanical trash, in cotton	264
bract, in raw cotton dust	702
breakthrough, determination for samplers	737
breakthrough curves, for organic vapors	169
statistics of	169

breakthrough equation, for respirators	1017	chlorine, determination in air	161
bromotrifluoromethane, cardiac arrhythmia from	653	reliability of detector tubes	746
in blood	653	2-chloro-1,3-butadiene, penetration of gloves	877
inhalation of	653	chloroethane, toxicity of	187
1,3-butadiene, exposure system for	789, 796	chloroethanes, review of toxicity	(3):A-46
inhalation toxicity of	789, 796	cholinesterase inhibition, by methane sulfonyl-	
monitoring in air	789, 796	fluoride	986
bryssinosis, botanical trash and	264	chromatography, for benzidine compounds	970
chemiluminescence of macrophages	860	chromatography plates, hazards of scraping	543
etiological agents of	860	chrysotile, adsorption properties of	781
histamine hypersensitivity in	74	cigarette smoke, methylfuran in	866
in Egypt	839	classification, by zone of exposure	47
inhibition of macrophages	860	clinical examinations, asbestos workers	11
role of cyclic AMP	1067	coal conversion, bioassay monitoring	823
role of cyclic GMP	1067	coal dust, effects of inhalation	283
immunologic response to			
respirable levels			
coal mines, respirable dust levels in		910	
coke oven emissions, penetration of filters		910	
respirator filters for		1030	
collection efficiency, validation of sampling		1030	
colorimetric, monitoring for phosgene		737	
communicating with workers		387	
community exposures, adjusting TLV of worker for		1159	
compressed air, carbon monoxide in		727	
computer model, of cotton dust sampling		548	
of human respiratory tract		535	
of vertical elutriator		1055	
computer prediction, of lifting capacity		535	
computer system, for occupational exposures		1075	
computer terminals, radiation from		553	
computer use, in hearing conservation		553	
computerization, of exposure data		604	
of industrial hygiene records		553	
of monitoring data		709	
concentrators, health in copper		545	
Congress, Energy and Health		695	
information requirements		1119	
consumer products, pressurized		1119	
control, asbestos exposures		330, 339	
concepts in basic design		11	
control strategy, for acrylonitrile		1129	
control technology, retrofitting		128	
copper, health of exposed workers		1126	
copper dust, comments on exposure limits		695	
hazards of		747	
toxicity of		245	
cost-effectiveness of risk reduction		245	
cotton, botanical trash in		1202	
cotton dust, composition of		264	
non-gravimetric sampling for		702	
sampling with vertical elutriator		578	
cotton dust sampling, comparison of methods		535	
with vertical elutriator		578	
cotton garnetting, botanical trash in		933	
counting, asbestos fibers		264	
criterion, 85 dBA for noise		(7):A-50	
crocidolite, adsorption properties of		424	
Cummings Memorial Lecture, 1979		781	
curtains, leaded for noise control		751	
cutting fluid smoke, hazards of		(9):A-28	
cutting fluid smoke, hazards of		562	
cutting fluids, smoke from		562	

cyanide, from polyurethanes	757
from thermal degradation	757
cyclic AMP, in byssinosis	1067
cyclic adenosine-3',5'-monophosphate, see cyclic AMP	1067
cyclic GMP, in byssinosis	1067
cyclic guanosine-3',5'-monophosphate, see cyclic GMP	1067
cylinders, gas single-use	(5):A-16
 D . . .	
DNA	1131
DOE, see Department of Energy	
DOP, see dioctyl phthalate	
data, computer handling of	553
delivery ward, analgesic gases in air	666
Department of Energy, science requirements	1114
deposition, of aerosols in lung	999
of aerosols in respiratory tract	1055
depth perception, effect of noise on	427
design, local exhaust ventilation	1
of stable atomizer	734
desorption, acrylonitrile from charcoal	923
of charcoal tubes	380
of solvents from charcoal	1006
detector tubes, use of chlorine	746
determination, nitrogen dioxide in air	437
of blood lead	230
of chlorine in air	161
of mineral fibers in air	108
of vinyl chloride in air	96
dibromoethane, carcinogenesis	(2):A-31
3,3'-dichlorobenzidine, air sampling and analysis for	970
1,4-dichloro-2-butene, penetration of gloves	877
dichloroethane, NIOSH guidelines	(3):A-46
diethanol-N-nitrosamine, determination by GC/MS	39
o,o-diethyl-S-(ethylthio)methyl ester, see phorate	
diffusion, in passive monitor	947
dimethyl ether, WEEL guide	(9):A-51
-(dimethylamino)ethyl ether, hazards of	(3):A-36
dimethylaminopropionitrile, hazards of	(3):A-36
2,5-dimethylfuran, retention of inhaled	866
dioctyl phthalate, high volume aerosol generator	979
in testing filters	979
respirator fit-test with	291
dose-response, extrapolations of	659
dosimeter, for nitrogen dioxide	437
dosimetry, for solvent exposures	1091
drywall construction, asbestos dust from	402
dust, asbestos	(5):A-20
coal	910
copper	245
cotton	702
fibrous glass	(9):A-14
from asbestos cement	490
olivine in foundry	609
silver	245
dust sampling, cotton	578
dyes, adsorption by asbestos	781

 E . . .	
EDA, see ethylenediamine	
EPA report, visibility in Northeast	253
ear protectors, at different sound levels	1023
measuring attenuation of	1023
education, of asbestos workers	11
Egypt, industrial hygiene research in	839
electromagnetic radiation, from computer terminals	300
electromyography, after exposure to manganese dioxide	349
elutriator, turbulence in	933
vertical	933
vertical for cotton dust	535
embryotoxicity, of benzene	993
enclosures, for noise control	961
endotoxin, histamine hypersensitivity	74
energy, dependence on	1114
environmental goals of	1114
energy production, impact on human health	1164
energy technology, risk to human health	1207
engineering controls, for noise	961
epichlorohydrin, carcinogen in trichloroethylene	685
monitoring for	(6):A-48
NIOSH information bulletin	(6):A-48
toxicity of	(6):A-48
epidemiology, from computer records	553
ethanolamine, in NO _x sampler	588
ethylene oxide, determination by gas chroma- tography	742
personal sampler for	742
ethylenediamine, monitoring exposures to	512
etiology, of byssinosis	860
evaluation, by exposure zones	47
evaluation of means of assessment of human health, (Symposium summary)	1217
evaluations, by hazard ratings	1039
exhaust ventilation, local	1
exposure data, computer handling of	553
exposure evaluation, zone technique	47
exposure guides, for work environments	(9):A-50
exposure levels, by retrospective surveys	58
exposure limits, adjustment of	727
exposure method, effect on pulmonary deposition	633
exposure profiles, by retrospective surveys	58
exposure system, for 1,3-butadiene	789, 796
exposure zones, for sampling technique	47
exposures, hazard ratings of to hydrazine	1039
	69
 F . . .	
fatigue, from lifting	894
fatigue criteria, by metabolic rate	894
fiberglass fabrications, styrene exposures in	451
fibers, asbestos determination	(7):A-50
electrical field monitor for	270
inorganic	20
mineral	108
size fractionation of	20
fibrous aerosols, monitor for	270

1979 SUBJECT INDEX . . .

fibrous glass, pneumoconiosis from	.....	(9):A-14	of inhalation exposures	.....	1039
filter sampling methods, for fluorides	.....	626	health, judicial function in	.....	1211
filters, for airborne particulates	.....	926	health aspects of oil shale	.....	1126
for coke oven emissions	.....	1030	health physics, interface with industrial hygiene	.....	721
high efficiency (HEPA)	.....	979	health risk assessment	.....	1114
PVC-polyacrylonitrile	.....	926	health team, hazard ratings by	.....	1039
polyamide	.....	926	hearing, effects of aging	.....	504
polycarbonate	.....	926	of aerospace workers	.....	436
quartz fiber	.....	926	hearing conservation, an effective program	.....	604
respirators	.....	1030	use of computer in	.....	604
sampling benzidine compounds	.....	970	versus aging	.....	504
testing of	.....	979	hearing loss, at 85dBA	.....	424
fire fighters, noise exposures of	.....	482	heat, evaluation of exposure limits	.....	1097
fit-test, for powered respirators	.....	291	hematofluorometer, determination of zinc	.....	
flax, hazards in Egypt	.....	839	porphyrin	.....	686
fluidized bed, incineration in	.....	147	hematology, from manganese oxide	.....	322
fluorescence, of carcinogens on skin	.....	496	hemopoietic effects, of glycidil ethers	.....	(5):A-36
fluoride, sampling methods	.....	626	hexachloroethane, NIOSH guidelines	.....	(3):A-46
fluoride storage, from methane sulfonylfluoride	.....	986	toxicity of	.....	187
foreign standards, sodium hydroxide	.....	365	high volume samplers, electronic constant flow	.....	835
fossil fuel, health surveillance related to	.....	1126	histamine, hypersensitivity from endotoxin	.....	74
foundry, use of olivine	.....	609	histopathology, from manganese oxide	.....	322
free silica, substitute in foundry	.....	609	hoods, improved canopy type	.....	118
frequency, of lifting	.....	894	hot environment, exposure limits	.....	1097
furan, acute toxicity of	.....	310	human exposures, to sulfate aerosols	.....	619
respiratory retention of	.....	310	hydrazine, rocket propellant	.....	69
G . . .				hydrazines, monitoring exposures	69
GC/MS, gas chromatography/mass spectrometry	.....	39	hydrogen sulfide, alarm system	.....	78
gas chromatography, determination of organic	.....		determination in air	.....	947
mixtures	.....	380	passive monitor for	.....	947
determination of organic vapors	.....	904	hypersensitivity, histamine	.....	74
determination of solvents in air	.....	1006	to coal dust	.....	283
for acetic anhydride	803	I . . .			
for ethylenediamine	.....	512	immunologic response, to coal dust	.....	238
for vinylidene chloride	.....	888	impinger, collection of arsenic oxide	.....	439
monitoring for phosgene	.....	387	for personal sampling	.....	354
gas chromatography/mass spectrometry, GC/MS	.....	39	modified spill-proof	.....	354
gas cylinders, reuse of	.....	(5):A-16	incineration, air pollution from	.....	147
gases, in delivery ward air	.....	666	in fluidized beds	.....	147
gasoline, benzene exposures from	.....	468	of munitions	.....	147
benzene from bulk loading	.....	468	index, of respiratory stress	.....	408
exposure to	.....	315	industrial health, specialist training	.....	(4):A-20
gasoline workers, benzene exposure of	.....	315	industrial hygiene, an interdisciplinary science	.....	751
glass, fibrous	.....	(9):A-14	in a democratic society	.....	(10):A-18
gloves, permeation rates of	.....	877	in Egypt	.....	839
protection time for	.....	877	interface with health physics	.....	721
glycidil ethers, effect on testes	.....	(5):A-36	programs for industry	.....	255
hemopoietic effects of	.....	(5):A-36	industrial hygiene records, computerization of	.....	709
NIOSH information bulletin	.....	(5):A-36	information media, responsibility	.....	1172
guides, workplace exposure	.....	(9):A-50	information requirement of the public	.....	1152
H . . .				inhalation, of bromotrifluoromethane	653
HEPA filters, testing efficiency of	.....	979	of coal dust	.....	283
Halon 1301, see bromotrifluoromethane	.....		of manganese dioxide	.....	349
inhalation of	.....	653	of manganese oxide	.....	322
hazard index, of polymer	.....	408	inhibition, of sulfur dioxide by oil mist	.....	680
hazard rating, calculation of	.....	1039	inorganic fibers, size-selected preparation	.....	20
of chemicals	.....	1039	insecticide, exposure of phorate	.....	1013
				insulation, new potential hazard	1126
				ionizing radiation, competence of industrial	
				hygienist	721

effects on nuclear workers	916, 919	manganese oxide, aerosol generation of	238
exposure of workers	395	inhalation toxicity of	238, 322
irritancy, of sulfur dioxide with oil mists	680	toxicity study design	238
irritants, predicting effects of	207	mass spectrometry, with gas chromatography	39
test for acceptable level	207	materials handling, lead-acid battery plates	637
irritation, from decomposition of polymers	408	measurement, of respirable volume	567
from methyl fluorosulfonate	600	media, analyzed nuclear power issues in	1179
stress index	408	responsibility	1172
sulfur dioxide and oil mist	809	mercury, calibration system with	180
isocyanates, generating standard concentrations	870	known concentrations of	180
permeation tubes for	870	mercury lamps, ultraviolet hazard from	756
J . . .		metabolic rates, criteria of fatigue	894
jet filter, as particle sampler	942	metals, trace	926
calibration for sampler	942	methane sulfonylfluoride, effects of exposure	986
size selective sampler	942	inhalation study of	986
L . . .		methoxyflurane, in delivery ward air	666
laboratory, proficiency testing	(7):A-18	methyl fluorosulfonate, toxicity of	600
laboratory proficiency tests, blood lead determination	230	methyl orange, determination of chlorine	161
lacinilene C, role in byssinosis	860	4,4'-methylene-bis(2-chloroaniline), determination	
lacinilene C-7-methyl ether, role in byssinosis	860	in urine	66
laminar flow, deviations in vertical elutriator	933	2-methylfuran, retention of inhaled	866
laser spectrometer, in testing filters	979	methylcyclopentadienyl manganese tricarbonyl, toxicity	164, 238
lead, determination by atomic absorption	1085	methylene-bis(2-chloroaniline), determination in urine, see MOCA	
determination in blood	230, 1085	metric usage, in AIHA	(7):A-14
tetraalkyl in air	372	mineral fibers, exposure to	108
lead-in-air, from plate handling	637	mineral oil, response to mist of	673, 680
from plate transport	637	mines, health in copper	695
lead stabilized PVC, passive monitor for H ₂ S	947	mists, oil	673, 680
leaded curtains, for noise control	(9):A-28	stable atomizer generator for	734
lecture, Cummings Memorial	751	mixtures, organic vapor analysis	380
Stokinger 1979	659	model, for aerosol deposition	999
Yant Award	839	models, in toxicology studies	659
lift, maximum acceptable for males	1141	monitor, for fibrous aerosols	270
lifting, effects of frequency	894	monitoring, acetic anhydride in air	803
maximum acceptable load	894	biologically active materials in air	823
lifting capacity, prediction of	1075	1,3-butadiene in air	789, 796
light scattering, monitor for fibers	270	computerization of data from	545
limits, of heat exposure	1097	for asbestos fibers	(7):A-50
local exhaust ventilation, principles	1	for epichlorohydrin	(6):A-48
lubricating oil, response to mist of	673, 680	for ethylenediamine	512
lungs, clearance of cadmium aerosols	443	for hydrazine	69
M . . .		for hydrogen sulfide	947
MMT, methylcyclopentadienyl manganese tricarbonyl	164	for phorate exposures	1013
MOCA, see methylene-bis(2-chloroaniline)		for tetraalkyl lead	372
macrophages, inhibition in byssinosis	860	health of nuclear workers	395
Magic Methyl, see methyl fluorosulfonate		of respirable volume	567
males, maximum acceptable lift	1141	phosgene in air	387
management, industrial health	255	styrene exposures	451
safety, 255		monitoring records, computerization of	709
scientific	1141	monitors, passive	1046
mandelic acid, metabolite of styrene	451	motor oil mist, effect on irritancy of SO ₂	809
manganese dioxide, aerosols	349	munitions, incineration of	147
toxicity of	349	mutagenicity, of shale oil	460
manganese, methylcyclopentadienyl tricarbonyl	164		
N . . .			
NIAX catalyst ESN, hazards of	(3):A-36		
NIOSH guidelines, for vinyl halides	(4):A-30		
nitrogen dioxide, determination in air	437		
passive dosimeter for	437		

personal sampler for	588	particulates, from pressurized consumer products	330, 339
nitrogen oxides, personal sampler for	588	jet filter sampler for	942
nitrous oxides, in delivery ward air	666	respirable size sampling	942
noise, exposures of fire fighters	482	passive dosimeter, for nitrogen dioxide	437
evaluation of 85 dBA criterion	424	passive monitor, for hydrogen sulfide	947
effect on stereoscopic depth perception	427	passive monitors, for total elemental content	1046
hearing conservation program	604	for total organic chlorine	1046
leaded curtains to control	(9):A-28	passive samplers, for solvent exposures	1091
non-industrial exposed population	504	penetration rates, chemicals through gloves	877
noise attenuation, by ear protectors	1023	penetration tests, of respirator filters	1030
noise control, by enclosure	961	pentachloroethane, NIOSH guidelines	(3):A-46
noise hazards, in Egypt	839	pentachlorophenol, contaminants in	816
non-occupational exposures, adjustment of TLV for	727	in wood treatment	816
nuclear industry, regulation of health hazards	395	permeation rates, of glove materials	877
nuclear power, public acceptance	1178	permeation tubes, for isocyanates	870
nuclear workers, cancer among	916, 919	for phosgene	387
monitoring health of	395	personal monitors, for total organic chlorine	1046
O . . .			
occupational health, in democratic society	(10):A-18	personal sampler, for ethylene oxide	742
occupational illnesses, petroleum industry	1165	for oxides of nitrogen	588
odors, air pollutants	85	personal sampling, also see personnel sampling	
annoyance potential of	85	modified impinger for	354
quantification of	85	personnel monitoring, for tetraalkyl lead	372
oil mist, effect on irritancy of SO ₂	809	personnel sampling, also see personal sampling	
with sulfur dioxide	680	petroleum industry, occupational illness	1165
oil mists, respiratory response to	673, 680	petroleum, fluorescence on skin	496
response of guinea pigs to	673, 680	pharmacocative compounds, in byssinosis	1067
oil shale, health aspects of	1126	phorate, exposures in formulating	1013
health hazards of	460	intoxication from	1013
toxic substances in	460	monitoring exposures	1013
toxicity testing program	1169	phosgene, monitoring in air	387
olivine, sand substitute	609	physiologic stress, from air supplied suits	592
use in gray iron foundry	609	physiological effects, of wearing respirators	517
organic phosphates, phorate exposures	1013	planning, use of hazard ratings	1039
organic vapor, breakthrough curves	169	plastic grinders, noise control for	961
organic vapors, charcoal tubes for	380	pneumatic conveyors, noise control for	961
detection by x-ray absorption	955	pneumoconiosis, from fibrous glass	(9):A-14
determination by GC/MS	39	polyamide filters, for particulates	926
test of respirators	883	polyaromatic filters, for particulates	926
organoisocyanates, see isocyanates		polychlorodibenzofurans, determination of	816
overtime, adjusting TLV for	727	polychlorodibenzo-p-dioxins, determination of	816
oxides of nitrogen, personal sampler for	588	polycyclic hydrocarbons, identification of	644
ozone, as occupational hazard	248	in carbon black	644
P . . .		in oil shale	460
PAT, laboratory proficiency testing	(7):A-18	polyesters, thermal decomposition of	408
PVC protective suits, physiologic stress from	592	polymerization, process controls	128
paper corrugators, noise control for	961	polymers, thermal decomposition of	408
paper tape, monitoring for phosgene	387	polytetrafluoroethylene, thermal decomposition of	408
paraffin oil, response to mist of	673, 680	polyurethanes, cyanide from	757
particle sampling, by jet filter	942	thermal degradation of	757
for respirable particles	942	polyvinylchloride, passive monitor for H ₂ S	947
particle size, of aggregate chains	474	supplied air suits of	592
samples of cotton dust	933	thermal decomposition of	408
particle sizing, cotton dust	578	polyvinylchloride-polyacrylonitrile filters, for	
particle spectrometer, in testing filters	979	particulates	926
particles, also see aerosols		porous polymers, in sampling organic vapors	904
proficiency testing, laboratory program			
			(7):A-18

prosthetic elbow, myoelectrically-controlled	1141
protection time, for gloves	877
protective clothing, effectiveness of	756
public, information requirement of	1152
pulmonary, sensitivity to coal dust	283
pulmonary clearance, of cadmium aerosols	443
pulmonary deposition, effect of cage population	633
of aerosols in rats	633
pyrene, aerosols of	763

Q . . .

quality control, for air pumps	249
quartz fiber filters, for particulates	926

R . . .

radiation, effects on nuclear workers	395
from video computer terminals	300
radon, in home from natural gas	1126
raw cotton dust, composition of	702
records, industrial hygiene computerized	709
refineries, health in copper	695
refrigerant gas, cylinder reuse	(5):A-16
regulatory process, devices which inhibit application of scientific knowledge	1170
reporters, scientist	1173
research, a service to the insured	1141
basic and applied	1107
history of scientific	1107
respirable dust, in surface mining	910
in coal mines	910
respirable particulates, from pressurized products	330, 339
respirable volume, measuring of	567
monitoring of	567
of large animals	567
respirator, fit-test methods	291
respirator canisters, evaluation of	1017
for acrylonitrile	1017
respirator cartridges, for acrylonitrile	883
for benzene	883
test system for	883
respirator filters, efficiency of	1030
respirators, capability to wear	517
evaluation of service life	1017
for coke oven emissions	1030
physiological effects of use	517
powered	291
psychological factors in wearing	517
use for carbon monoxide	832
respiratory response, to oil mists	673, 680
respiratory retention, of furan	310
respiratory tract, aerosol deposition in human	1055
computer model study	1055
retention, of furan in lungs	310
of inhaled 2,5-dimethylfuran	866
of inhaled 2-methylfuran	866
retrospective surveys, exposure levels by	58
risk, determining acceptable	1200
evaluation	1205

population	1201
risk reduction, cost effectiveness of	1202
risk to human health, energy technology	1207
risk-benefit balance	1203
risk-benefit determination	1200
rocket propellant, hydrazine	69
rubber, use of carbon black in	644
rubber coating, benzene exposure from	137

S . . .

SRM, standard reference materials	(7):A-20
safety, programs for industry	255
safety glasses, ultraviolet attenuation by	770
samplers, electronic constant flow	835
passive	1091
sampling, acetic anhydride in air	803
air for benzidine compounds	970
arsenic oxide in air	439
by exposure zones	47
for acetone	904
for acetonitrile	904
for acrolein	904
for acrylonitrile	904
for benzene in air	137
for cotton dust	578
for ethylene oxide	742
for ethylenediamine	512
for fluoride particulates	626
for gaseous fluorides	626
for mineral fibers	108
for nitrogen dioxide	437
for vinyl chloride in air	96
modified impinger for	354
particulates in air	926
vinylidene chloride in air	888
sampling system, validation of	737
sand, substitute in foundry	609
sanding, drywall joints	402
science, politics in	1107
science and society	1191
scientific advisory panel	1147
scientific fact finding	1147
scientific information in the regulatory process	1169
scientific management	1141
scientific methods, policy makers	1147
scientific questions, social concerns	1147
scientist, credibility of	1152
scientist, reporters	1173
responsibility of the	1136
scientist and health information	1136
scopoletin, role in byssinosis	860
screens, vibrating	20
screw machines, noise control for	961
sensitivity, histamine	74
sensory irritants, acceptable levels of	207
sensory irritation, stress index	408
service stations, benzene exposures at	315
shale oil, bioassay monitoring	823
health hazards of	460
side-shield, for ultraviolet attenuation	770
silica gel, sampling benzidine compounds	970

sampling for ethylenediamine	512
silica hazards, in Egypt	839
silver dust, comments on exposure limits	747
hazards of	245
toxicity of	245
size-selective, preparation of fibers	20
size selective sampling, with jet filter	942
skin, fluorescence of carcinogens on	496
smelters, health in copper	695
smoke, from cutting fluids	562
smoking, adverse effects of	(7):A-38
risk in workplace	(7):A-38
synergistic toxicity	(7):A-38
social concerns, scientific questions	1147
society, related to industrial hygiene	(10):A-18
sodium hydroxide, critique of standard	365
solvent dosimetry, charcoal felt for	1091
solvents, determination in air	1006
determination of non-polar	1006
determination of polar	1006
determination with charcoal tubes	1006
stable atomizer for	734
sorbent cartridges, for coke oven emissions	1030
use with filters	1030
sorbents, for vinyl chloride	96
spackling compounds, asbestos dust from	402
specialists, industrial health	(4):A-20
spectacle lens, ultraviolet attenuation by	770
spectrometer, intercavity laser for particles	979
spectroscopy, atomic absorption	1085
spiral centrifuge, with aggregate particles	474
spray painting, injuries from airless	822
liquid pressure injuries	822
standard atmospheres, of isocyanates	870
standard reference materials, NBS	(7):A-20
standards, adjustment of	727
based on hazard ratings	1039
fallacies in	659
for bioassay monitoring	823
for lifting capacity	1075
sodium hydroxide aerosols	365
statistical lung model, for aerosol deposition	999
stereoscopic depth perception, effect of noise on	427
Stokinger Award Lecture, 1979	659
stress index, for sensory irritation	408
strip mining, respirable coal dust in	910
styrene, exposures to	451
in expired air	451
metabolites in urine	451
sulfate aerosols, generation of	619
human exposure to	619
sulfur dioxide, effect with oil mist	809
exposure with oil mist	680
sulfuric acid, aerosol exposures	619
supplied air suits, physiologic stress from	592
surveillance, clinical examinations for	11
of asbestos hazards	11
surveillance records, computerization of	709
surveys, retrospective	58
T . . .	
TLV, adjustment for "moonlighting"	727
adjustment for non-occupational exposure	727
adjustment for overtime	727
taping drywall joints, asbestos dust from	402
testicular atrophy, from glycidil ethers	(5):A-36
tetraalkyl lead, personnel monitoring for	372
tetrachloroethane, NIOSH guidelines	(3):A-46
thermal balance, in supplied air suits	592
thermal decomposition, of polymers	408
thermal degradation, of polyurethanes	757
Thimet, also see phorate	
thin-layer chromatography, hazard from plates	543
threshold level, for methane sulfonylfluoride	986
tidal volume, monitoring of	567
tire production, carbon black in	644
toxaphene, carcinogenesis bioassay	(5):A-26
toxaphene bioassay, revised information	459
toxicity, 1,3-butadiene	789, 796
enhanced by smoking	(7):A-38
from thermal degradation of polyurethanes	757
of benzene	993
of cutting fluid smoke	562
of epichlorohydrin	(6):A-48
of furan	310
of manganese dioxide	349
of manganese oxide	322
of methyl fluorosulfonate	600
of shale oil	460
of thermal decomposition of polymers	408
toxicity testing program, oil shale	1169
toxicologic, meaningful studies	1136
toxicology models, interpretation of	659
trace metals, filters for	926
training, industrial health specialists	(4):A-20
trach, in cotton	264
tremors, from manganese dioxide	349
trichloroethane, NIOSH guidelines	(3):A-46
trichloroethylene, question of carcinogenicity	685
triethanolamine, method for nitrogen dioxide	437
tumors, promoters of	1131
U . . .	
ultraviolet, attenuation by glasses	770
from mercury lamps	756
protection in welding	770
urine, determination of MOCA in	66
V . . .	
validation, for sampling-analysis systems	737
vanadium pentoxide, aerosols of	763
vapor pressure, of pyrene	763
of vanadium pentoxide	763
vapors, calibration concentrations	180
detection by x-ray absorption	955
ventilation, by canopy hoods	118
local exhaust	1
vertical elutriator, computer model of	535

flow separations in	933	wood treatment, polychlorodibenzo derivatives in	816
for cotton dust	535	work histories, computerization of	709
for cotton dust sampling	933	work loads, maximum acceptable	894
vibrating screens, for size separations	20	work performance, wearing respirator	517
video computer terminals, radiation from	300	work suspension, in air pollution episode	248
vinyl bromide, carcinogenicity of	(4):A-30	workers, communicating with	1159
vinyl chloride, carcinogenicity of	(4):A-30	Workplace Environmental Exposure Guides	(9):A-50
collaborative testing for	200		
determination by GC/MS	39		
determination in air	96		
passive personal monitors for	1046		
validation of analyses	200	X . . .	
vinyl halides, carcinogenicity of	(4):A-30	x-ray, examination guidelines	788
NIOSH guidelines for	(4):A-30	x-ray absorption, detection of organic vapors	955
vinylidene chloride, carcinogenicity of	(4):A-30		
determination in air	888	Y . . .	
visibility, EPA report	253	Yant Award lecture, 1979	839
vision, noise effect on depth perception	427		
W . . .		Z . . .	
WBGT, evaluation of exposure limits	1097	ZnP, see zinc protoporphyrin	
WEEL's, exposure guides	(9):A-50	zinc protoporphyrin, biologic threshold of	686
weight, lifting capacity	1075	determination in blood	686
welding, protection from ultraviolet	770	indicator of iron deficiency	686
wet bulb globe temperature, see WBGT		indicator of lead absorption	686
		zone, classification of exposures	47